What is claimed is:

1. A method for identifying pathogens, comprising:

providing an image;

processing the provided image with an image segmentation algorithm to isolate at least one segment of the provided image that has a feature that is of interest; and

comparing the isolated segment of the provided image to a plurality of reference images to determine if the isolated segment corresponds to any of the reference images.

2. The method according to claim 1 wherein the step of providing the image comprises acquiring the image.

3. The method according to claim 2 wherein the step of acquiring the image comprises processing the acquired image to provide pertinent portions of the acquired image.

4. The method according to claim 2 wherein the step of acquiring the image comprises digitizing the acquired image.

5. The method according to claim 4 wherein the step of acquiring the image further comprises digitally enhancing the digitized image.

6. The method according to claim 5 further comprises storing the digitally enhanced image in a data storage device.

7. The method according to claim 1 wherein the provided image comprises an image of a specimen.

8. The method according to claim 1 wherein the provided image comprises a dental x-ray.

9. The method according to claim 1 wherein the image segmentation algorithm comprises a recursive hierarchical segmentation algorithm.

10. The method according to claim 1 wherein the step of comparing the isolated segment to the plurality of

reference images comprises:

processing the isolated segment with a data mining algorithm to extract particular image data from the isolated segment; and

processing the extracted particular image data and each of the reference images with a optical recognition algorithm to determine if the extracted particular image data matches any of the reference images.

11. The method according to claim 10 further comprising:

providing a display device; and

displaying the extracted data and the results of processing the extracted image data and each reference image.

12. The method according to claim 1 further comprising providing a data base having a plurality of reference images stored therein.

13. A system for identifying pathogens, comprising:

a device to provide an image;

a data base having at least one reference image stored therein; and

an image processing resource to (i) process the provided image with an image segmentation algorithm to isolate at least one segment of the provided image that has a feature of interest, and (ii) to compare the isolated segment of the provided image to the reference image to determine if the isolated segment corresponds to the reference image.

14. The system according to claim 13 wherein the device comprises a device to acquire the image.

15. The system according to claim 14 wherein the device comprises a digitizer to digitize the provided image.

16. The system according to claim 15 wherein the device further comprises an enhancer device to digitally enhance the digitized image.

17. The system according to claim 16 further comprising a data storage resource for storing the digitized images.

18. The system according to claim 13 wherein the provided image comprises an image of a specimen.

19. The system according to claim 13 wherein the provided image comprises a dental x-ray.

20. The system according to claim 13 wherein the image segmentation algorithm comprises a recursive hierarchical segmentation algorithm.

21. The system according to claim 13 wherein the image processing resource is configured to process the isolated segment with a data mining algorithm to extract image data from the isolated segment.

22. The system according to claim 21 wherein the image processing resource processes the extracted image data and the reference image with a optical recognition algorithm to determine if the extracted image data matches the reference images.

23. The system according to claim 22 further comprising a display device to display the extracted data and the results of processing the extracted image data and the reference image with the optical recognition algorithm.

24. The system according to claim 13 wherein the image processing resource comprises a paralleling processing resource.

25. The system according to claim 24 wherein the paralleling processing resource comprises a Beowulf cluster.

26. The system according to claim 13 wherein the device comprises a video camera.